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ABSTRACT

The major goal of Project SPEED (at Fort Hamilton High School, Brooklyn, New York) was dropout prevention. In its first year of operation, 1982-83, the project provided English as a Second Language (ESL) instruction, bilingual instruction in basic skills required for graduation, and guidance services to approximately 300 limited English proficient (LEP) students in grades 9-12 who were regarded as high risks for dropping out. The students, mostly recent immigrants, were 65 percent Spanish speaking, 20 percent Chinese speaking, and 15 percent Arabic speaking. The project's individualized approach was based on three models, each having a specific goal and curricular emphasis: Model I aimed at dropout prevention, particularly for 9th and 10th graders; Model II aimed at truants whose likelihood of staying in school is minimal; and Model III aimed at retaining LEP students older than 18. Evaluation of the project, however, showed that it was impossible to examine these models as such because the counseling, educational, and vocational guidance components that were to differentiate them had not been formally implemented. In terms of student achievement, quantitative analysis indicated the following: (1) attainment of English language objectives was mixed; (2) objectives in content area courses were attained overall; (3) 75 percent of students taking the High School Equivalency Exam passed; and (4) the program attendance rate was significantly greater than the general attendance rate. In addition, curricular materials were being developed and adapted in the three native languages, and staff participated in meetings, workshops, and university courses. Finally, parent participation was minimal. (CMG)

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FORT HAMILTON HIGH SCHOOL

PROJECT SPEED: SPECIAL

EDUCATION TO ELIMINATE DROPOUTS

1982-1983

OEE Evaluation Report

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O.E.E. Evaluation Report

February, 1984

Grant Number: G00-820-2691

FORT HAMILTON HIGH SCHOOL

PROJECT SPEED: SPECIAL

EDUCATION TO ELIMINATE DROPOUTS

1982-1983

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A SUMMARY OF THE EVALUATION
FOR PROJECT SPEED
FORT HAMILTON HIGH SCHOOL
1982 - 1983

This program, in its first year of a three-year funding cycle, provided instruction in E.S.L., as well as bilingual instruction in basic skills areas to approximately 300 students of limited English proficiency in grades nine through twelve. Sixty-five percent of the target population were native speakers of Spanish; 20 percent were Chinese-speaking; and 15 percent spoke Arabic as their native language. Although the students varied in educational preparedness, ability in their native languages, and proficiency in English, most were recent immigrants and formed a "high risk" group in terms of their likelihood of dropping out of school.

The major program goal was drop-out prevention. Students received bilingual instruction in basic skill areas required for high school graduation and guidance services aimed at helping them adjust to, and cope with, their new environment. The program was transitional in nature. Students were gradually placed in mainstream classes where they were fully evaluated on a continuous basis. Program philosophy was implemented through an individualized approach that took into account the varying backgrounds, abilities, competencies, and needs of each student. This approach drew upon three models, each having a specific goal and curricular emphasis: Model I aimed at drop-out prevention; Model II for truants whose likelihood of remaining in school is marginal; and Model III, a retention program for older LEP students.

Administrative and support services staff positions were supported by a combination of Title VII and tax-levy funds. Instructional services were funded by tax-levy and supplementary Module 5B monies. Curriculum materials were being developed and adapted in the areas of: Arabic social studies, science, and mathematics; Chinese social studies, language studies, and science; and Spanish social studies, business, and computer science. Supportive services to program students consisted of educational, personal, and vocational guidance, and referrals to outside agencies. Development activities for staff members included attendance at monthly meetings, in-house workshops, and university courses. Parents of participating students were involved through phone calls, home visits, and attendance at school-wide activities. The parents advisory board was inactive as a result of the program's trilingual nature and outside, work-related commitments.

Students were assessed in English language development (Criterion Referenced English Syntax Test); mathematics, science, social studies, and business/vocational courses (teacher-made tests); performance on the High School Equivalency Examination; and attendance (school and program records). Quantitative analysis of student achievement indicates that:

-- Program students pre-tested in the fall and post-tested in the spring failed to master one CREST objective per month. However, students pre- and post-tested in the spring did reach the criterion level with a mastery rate of 1.47 CREST objectives per month.

-- In mathematics, science, social studies, and business/vocational courses, program students achieved overall passing rates of at least 70 percent passing in both the fall and spring semesters. The highest passing rates were achieved by the Chinese-speaking student group in both terms.

-- Seventy-five percent of the Model III program students taking the High School Equivalency Examination passed.

-- The attendance rate of program students was significantly greater than the total school attendance rate.

The following recommendations are aimed at improving the overall effectiveness of the program:

-- Developing and implementing a low literacy instructional sequence in E.S.L., native language, and the subject areas for those students lacking basic skills in their native languages;

-- Providing additional bilingual content-area courses and native language studies instruction for Chinese- and Arabic-speaking students;

-- Implementing a language policy to govern the use of English and the native language in bilingual content-area courses;

-- Examining instructional techniques and approaches appropriate for classes with students of differing educational backgrounds and levels;

-- Providing formal individual and group counseling services on a consistent basis and, at the same time, exploring and utilizing outside services. For example, a series of presentations by bilingual professionals from a variety of occupations might improve the career awareness/orientation component of the program;

-- Requesting staff members to attend outside conferences on bilingual education and inviting professionals to conduct in-house staff training workshops. Further, the program should make information on bilingual education and the needs of bilingual students available to mainstream teaching staff;

-- Holding informal workshops for parents of program students to familiarize them with the American educational system, issues of concern to bilingual students and their families, and to members of the other two language groups;

-- Establishing a well-structured, thorough system for documenting program activities;

-- Having bilingual materials professionally duplicated and bound so that they will not be judged by students and parents as inferior to commercial textbooks available to mainstream students.

ACKNOWLEDGEMENTS

The production of this report, as of all O.E.E. Bilingual Education Evaluation Unit reports, is the result of a cooperative effort of permanent staff and consultants. In addition to those whose names appear on the cover, Karen Chasin has spent many hours creating, correcting, and maintaining data files. Joseph Rivera has worked intensely to produce, correct, duplicate, and disseminate reports. Without their able and faithful participation the unit could not have handled such a large volume of work and still produced quality evaluation reports.

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PROJECT SPEED: SPECIAL EDUCATION
TO ELIMINATE DROP-OUTS

Fort Hamilton High School

Location:	8301 Shore Road, Brooklyn, New York
Year of Operation:	1982-1983 first of three years of funding
Target Languages:	Spanish, Chinese, Arabic
Number of Participants:	Approximately 300 students
Principal:	Mr. Diego Coscarelli
Director:	Mr. Robert Diaz

I. DEMOGRAPHIC CONTEXT

ENVIRONMENT

Fort Hamilton High School is located in the Bay Ridge section of Brooklyn, a commercial area one hour by train from mid-Manhattan. It is bordered by a middle- to upper-class suburban neighborhood with well-kept two-family houses. The neighborhood, with its trimmed lawns and gardens, is usually quiet except during those hours when students attend school. Fort Hamilton High School is unique not only for its location, but also for its view; located near the Belt Parkway, it overlooks the water to Staten Island.

SITE CHARACTERISTICS

Fort Hamilton High School is a well-maintained four-story building without grafitti or broken windows. The school's hallways and classrooms are decorated with student art work. Project SPEED is located on the main floor of the school building. Due to budget cuts, the program is

currently housed in what had been the resource room in previously funded projects. Past evaluations have commented on the need for more space; the program now occupies less space than in the past.

As a consequence, all seven staff members, six desks, a large conference table, file cabinets, bookcases, and closets are housed in one small room. This room not only serves as the program office, but also as its resource room; counseling, tutoring, and other services take place here. Students constantly visit for information, tutoring, counseling, or homework. These conditions create considerable noise and allow little or no privacy. Thus, evaluation interviews were conducted in the library or in unoccupied classrooms. A member of the evaluation team observed that while in the program office, students tended to use their native languages.

Of the 2,935 students registered at Fort Hamilton, 36 percent are categorized as low income according to federal poverty level criteria; 45 percent are eligible for free and reduced lunch. Almost half of the student body reads at grade level, over one-third read at two or more years below grade level, and over half is below grade level in math achievement. Ethnically, the school population is composed mostly of white students; over one-third is Hispanic, approximately 12 percent is black, and seven percent is of Asian origin.

II. STUDENT CHARACTERISTICS

COMPOSITION AND DIVERSITY

Project SPEED provides bilingual education to approximately 300 limited English proficiency (LEP) students belonging to three language groups. The largest group served is composed of Spanish-speaking students (205); Chinese-speaking students comprise the second largest group (60); and Arabic-speaking students form the smallest group participating in the program (54).

Project SPEED differs from previously funded Title VII projects at Fort Hamilton (GRASP - five-year project; ELITES - two-year project) in two main areas: the new program stresses drop-out prevention and remediation; and it has added a bilingual component for those Chinese students who are new to the country. This major addition to Fort Hamilton will not only benefit its Chinese students eligible for bilingual services, but also those Chinese students living outside the immediate area who are eligible to attend the school on the basis of its "magnet concept" policy.

Most program students are recent immigrants who face considerable cultural and economic, as well as linguistic, obstacles. The families of participating students tend to be of low socioeconomic status and share a common goal of "survival." In most families, both parents work and their children may also hold jobs or, in some cases, are left unsupervised. Very often, parents are ill-prepared, both academically and culturally, to assist their children with school work. Interviews with the principal and assistant principal for foreign

language, arts, and music emphasized that guidance services and general reassurance seemed to ease the pressures of transition.

Commenting on the differences in educational motivation between and within language groups, the principal, assistant principal, and program director observed that the Chinese students, particularly those from Hong Kong and Taiwan, have a strong educational background both in their native language and in English. In addition, they demonstrate great motivation and desire to improve their English language skills. An interview with a seventeen-year-old program student from Taiwan supported these observations. This student, who had arrived five months earlier, was attending supplemental English courses at Brooklyn College after school. Although self-conscious about her English, she spoke with relative fluency.

The Arabic-speaking students are often divided by religious and national backgrounds. The long history of tension between Moslems and Christians has resulted in sporadic clashes between members of this group at the school. The Arabic-speaking program staff have been working to ease these tensions to create a sense of unity among students. Of the Arabic speakers, those from Lebanon constitute a majority and have an educational background in French. The Yemenites tend to arrive with little or no formal schooling. The Palestinians have received some training in English.

Among the Spanish-speaking students, those educated in metropolitan areas of Central and South America are better prepared academi-

cally. One teacher spoke enthusiastically about a Peruvian student who was under consideration for placement not only in the mainstream, but in honors courses as well.

The following table presents the countries of origin and language groups of program students for whom information was reported. Table 2 presents the program students by sex and grade.

TABLE 1

Number and Percent of Program Students by

Language and Country of Birth

Country of Birth	Number of Students	Percent of Language Group
Vietnam	6	10
People's Republic of China	9	25
Taiwan	5	8
Hong Kong	40	67
TOTAL Asian	60	100
Israel	5	9
Lebanon	19	35
Syria	5	9
Yemen	13	24
Egypt	5	9
Other "Middle Eastern"	7	13
TOTAL Middle Eastern	54	100
Puerto Rico	81	40
Dominican Republic	37	18
Cuba	1	less than 1
Mexico	9	4
Honduras	4	2
Guatemala	5	2
El Salvador	6	3
Nicaragua	2	1
Panama	17	8
Colombia	4	2
Ecuador	23	16
Peru	4	2
Venezuela	2	1
TOTAL Hispanic	205	100

Native Language	Number of Students	Percent of Program
Chinese		
(Mandarin)	5	2
(Cantonese)	53	17
(Other Dialect)	1	less than 1
Vietnamese	1	less than 1
Arabic	52	16
Hebrew	1	less than 1
Other "Middle Eastern"	1	less than 1
Spanish	205	64
TOTAL	319	100

- Sixty-four percent of the program students are Spanish-speaking. Of these, 40 percent were born in Puerto Rico.

- Chinese-speaking students constitute approximately 20 percent of the program. The majority of these students were born in Hong Kong.

- Sixteen percent of the program population speak Arabic.

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TABLE 2

Number and Percent of Program Students
by Sex and Grade

Grade	Number Male Students	Percent of Grade	Number Female Students	Percent of Grade	Total Number	Percent of All Students
9	51	65	28	35	79	24
10	51	55	41	45	92	29
11	42	49	44	51	86	27
12	24	38	39	62	63	20
TOTAL	168	53[a]	152	47[a]	320	100

[a]Percent of students in the program.

- The proportion of males decreases as grade increases; inversely, the higher the grade, the greater the proportion of females.

Students' diverse life histories, particularly their countries of origin and conditions of migration (i.e., political, economic, etc.) result in great variation in educational background and academic preparation. Many have suffered interrupted schooling or have experienced limited educational opportunities. As a result, they have received fewer years of schooling than their grade level and age would indicate. Table 3 presents the program students by age and grade and a breakdown of overage students by language group.

TABLE 3

Number of Program Students by Age and Grade

Age	Grade 9	Grade 10	Grade 11	Grade 12	Total
14	8	0	0	0	8
15	16	12	2	0	30
16	20	29	10	2	61
17	17	25	29	9	80
18	11	10	22	32	75
19	6	11	12	14	43
20	1	2	10	4	17
21	0	2	1	1	4
23	0	0	0	1	1
TOTAL	79	91	86	63	319

Overage Students	All Students				
Number	55	50	45	20	170
Percent	70	55	52	32	53

Chinese-Speaking Students

Number	12	10	11	2	35
Percent	63.2	45.5	78.6	40.0	58.3

Arabic-Speaking Students

Number	17	6	9	4	36
Percent	89.4	50.0	64.2	40.0	65.4

Spanish-Speaking Students

Number	26	34	25	14	99
Percent	63.4	59.6	43.1	29.2	48.5

Note. Shaded boxes indicate expected age range for grade.

- Fifty-three percent of the program students are overage for their grade.
- The proportion of overage students tends to decrease as grade increases for program students in general and, particularly among Spanish-speaking students.
- The high percentage of overage students reflects the education and migration histories of these students.

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The high proportion of overage students should be considered when setting standards for performance and evaluating growth. Students who have had interrupted schooling, but whose grade level reflects their ages more than their level of academic preparedness, may lack cognitive development in their native languages. This deficiency may be directly related to their ability to acquire oral and literacy skills in English. Table 4 presents the time spent by students in the bilingual program.

TABLE 4

Time Spent in the Bilingual Program

(As of June, 1983)

Time Spent in Bilingual Program	Number of Students				
	Grade 9	Grade 10	Grade 11	Grade 12	Totals
<1 Academic Year	6	9	2	0	17
1 Academic Year	74	83	84	62	303
TOTALS	80	92	86	62	320

- Ninety-five percent of the students had completed one year in the program.
- The remaining students entered the program at various times during the academic year.

PARTICIPANT SELECTION

Fort Hamilton's student body numbers 2,935. Students whose native language is not English make up approximately 21 percent of the total school population. Language groups other than those represented in Project SPEED include Italian (225), Polish (17), Korean (23), and Haitian-Creole (19). When students first enter Fort Hamilton, they are administered a series of tests to determine eligibility for participation in bilingual and/or English as a second language (E.S.L.) classes.

The entrance and exit criterion used by the program is the English form of the Language Assessment Battery (LAB). All students are tested with the LAB and the Criterion Referenced English Syntax Test (CREST). Only those students who score below the twenty-first percentile of the LAB are eligible for the program. Students are then interviewed by the director or resource teacher in their native language; students also receive teacher recommendations. Since there is no standard diagnostic test, the interview is designed to test students' literacy in their native language by sampling their reading and writing skills. The interviews also elicit information not revealed by test scores alone, including students' educational histories, the circumstances that brought them to this country, and general interests and goals.

The program director also interviews LEP students who do not belong to one of the target groups. By providing appropriate assessment services to these students, they can be placed in either remedial or mainstream classes.

LANGUAGE PROFICIENCY

Program students differ both with regard to native language proficiency and the length of time needed to acquire and use language skills in English.

One characteristic shared by the Arabic and Chinese students is that both of their native languages contain distinct dialects. This creates an additional barrier for these students; they are often unable to understand other members of their ethnic group and must rely on written communication. Thus, these students must not only learn English, but must also adapt to the regional dialects of their fellow students.

Individual and group differences also exist in terms of students' adaptation to and use of English. It was reported that Chinese students associate learning English with upward mobility; for this reason, they tend to be extremely eager to learn the language and advance to mainstream courses. Chinese staff members have also observed that their students encounter greater problems with English pronunciation than with grammar. This can be understood both in terms of the linguistic differences between the two languages and cultural values which stress writing, as opposed to oral communication, as the most appropriate vehicle for self-expression in the classroom.

As a rule, the Arabic students want to learn spoken English in a short time and tend to experience more difficulty with grammar than with the spoken language. Many of these students are eager to help

with family businesses and are anxious to develop their speaking skills in order to do so. However, many work eight to ten hours per day and, as a result, often miss first period. Eventually, many drop out.

The Yemenites differ from the other Arabic-speaking students in that no female Yemenites participate in the program. Since Yemenite culture deems it inappropriate for females to attend school, males tend to immigrate alone. These Yemenite students are eager to learn and are known to prepare lists of new vocabulary words, then rush to the program office during their ten-minute breaks to get Arabic translations.

During interviews, the program director and teaching staff noted that, as a group, the Spanish-speaking students are hesitant to speak English. They appear to be embarassed by their mistakes and fear ridicule. An evaluator interviewed a Spanish-speaking student who spoke English with fluency, yet indicated she felt "funny" because she thinks in Spanish and then translates her thoughts into English.

III. PROGRAM DESCRIPTION

PROGRAM GOALS AND OBJECTIVES

Project SPEED has two main goals: to provide bilingual instruction to targeted LEP students who have difficulty coping with a traditional high school setting and run a high risk of dropping out; and to improve the school's holding power by providing drop-out prevention and remediation services. Through this program, students acquire the basic skills required for high school graduation.

Specific instructional and non-instructional objectives are listed in the Appendices and will be discussed in more detail in the conclusions and recommendations section.

PROGRAM PHILOSOPHY

The program's philosophy as stated by the principal, the assistant principal for foreign language, art, and music, and the program director, is to mainstream students after two years of participation. During this time, students are also provided with guidance services aimed at helping them cope with their new environment. If students are not proficient in English after two years, it is felt that they would have difficulty in realizing plans for further education after high school graduation.

The program is transitional in nature. Students are slowly placed in mainstream classes and their progress is fully evaluated on a continuous basis. The assistant principal expressed concern about students being placed in slow classes due to language problems.

The program philosophy is implemented through an individualized approach that takes into account the varying backgrounds, abilities, competencies, and specific needs of the students. This individualized approach draws upon three models, each having a specific goal and curricular emphasis. Model I is aimed at drop-out prevention particularly for students in grades 9 and 10; Model II is a program for truants whose likelihood of staying in school is marginal; and Model III is a retention program for LEP students older than 18 years. Through these models, the project seeks to reach all students who have distinct problems and issues in coping with existing educational offerings.

ORGANIZATION, STRUCTURE, AND STAFFING

The bilingual program is a self-contained instructional program although it does not have departmental status. The program is under the general supervision of the assistant principal for foreign language, art, and music, who assumed this position in an acting capacity in February, 1983. He replaced the previous assistant principal who retired. The day-to-day coordination of the project is now the responsibility of the program director who, prior to February, 1982, was the coordinator of educational guidance. The assistant principal stated that although he was not involved in the implementation of the project, he believes the teaching is excellent and the students are benefitting enormously.

The program director has been associated with previously funded Title VII programs, working as coordinator of Project ELITES, and has been at Fort Hamilton for the last fifteen years. Among the

other positions he has held during his fifteen-year tenure are language teacher and dean of discipline. He has also been responsible for the development and implementation of Project SPEED.

Two Title VII bilingual resource teachers (Arabic and Chinese) are responsible for three major aspects of the program: pull-out instructional services; curriculum development; and guidance. Since funding was not available for a Spanish resource teacher, this position was filled by a tax-levy teacher already on the school staff. This teacher has been the bilingual attendance coordinator for the last two years and has been a licensed Spanish bilingual history teacher for five years. The Arabic resource teacher worked with Project ELITES at Fort Hamilton. Although new to the staff, the Chinese resource teacher has several years of experience with the New York City Board of Education in educational administration and supervision. In addition, she has worked in the Chinese community where she was involved with program development.

The resource teachers spend from three to four periods a day in activities related to the pull-out instructional component; the rest of the day is spent providing individual tutoring, counseling, and translating materials. Because of the nature of the pull-out program, mainstream teachers depend on the resource teachers to work closely with program students. In addition, the resource teachers translate tests used not only to measure progress, but also to develop students' test-taking skills.

The program employs three paraprofessionals, each proficient in one of the three target languages. The paraprofessionals spend most of their time tutoring individual students and acting as interpreters. A Title VII-funded secretary provides clerical services.

The diverse backgrounds and experience of program staff are listed in the Appendices.

FUNDING/INSTRUCTIONAL AND NON-INSTRUCTIONAL COMPONENTS

The funding sources of the instructional component are listed in Table 5. All E.S.L. instruction is supported by tax-levy or supplementary (P.S.E.N.) monies. Funding and staffing of the non-instructional component are presented in Table 6.

TABLE 5

Funding of Instructional Component[a]

Content Area	Funding Source	Number of Teachers
English as a Second Language	Tax Levy	1.8
	P.S.E.N.	1.0
Native Language (Spanish)	Chapter 268	0.4
Mathematics (Arabic)	Title VII[a]	0.2
Science (Chinese)	Title VII[a]	0.2
(Arabic)	Title VII[a]	0.2
Social Studies (Spanish)	Module 5B	0.4
(Chinese)	Title VII[a]	0.4
(Arabic)	Title VII[a]	0.2
Other Computer (E.S.L.)	Tax Levy	0.2

[a]Pull-out instructional assistance provided by resource teacher.

Source. High School Personnel Inventory for Bilingual/E.S.L. Programs, April 11, 1982, Division of High Schools, New York City Public Schools.

TABLE 6

Funding of Non-Instructional Program Components

	Funding Source(s)	Personnel: No. & Title(s)
Administrative & Supervision	Tax Levy Title VII	1 A.P. Foreign Language 1 Project Director
Curriculum Development	Title VII	2 Resource Teachers (Arabic-Chinese)
Supportive Services	Title VII Tax Levy	3 Paraprofessionals (Arabic, Chinese, Spanish) 1 Bilingual Dean
Staff Development	Title VII Tax Levy	1 Project Director 1 A.P. Foreign Language
Parental & Community Involvement	Title VII/Tax Levy	All personnel involved
Secretarial & Clerical Services	Title VII	1 Secretary

IV. INSTRUCTIONAL COMPONENT

STUDENT PLACEMENT, PROGRAMMING, MAINSTREAMING

The project director prepares term program plans for all project students as well as for those LEP students not participating in the project. These individualized program plans are based on interviews, teacher recommendations, test scores, and student interests. The program director selects those classes required for graduation and students choose electives. In general, student programs are fairly uniform by grade; however, some classes such as American studies or bilingual computer studies contain students of mixed grade levels.

Program students are placed not only according to their abilities, but according to which model is most appropriate for their specific drop-out problem. A three-fold instructional approach was established to meet the specific needs of these students. In addition, this approach aims to improve the school's holding power with respect to these high-risk LEP students. The program offers three models for each of the three language groups.

Model I

Designed as a drop-out prevention program, Model I targets primarily ninth- and tenth-grade students who exhibit irregular attendance. According to the project director, these students take required courses (basic skills) parallel to those in the mainstream. The model's main objective is to change students' attitudes and reinforce their positive

feelings about school. To achieve this, students are encouraged to explore and and develop individual talents and to take "hands-on" courses such as auto and electrical shop.

Model II

This model is designed for students with a history of long-term absenteeism and truancy, and those students who have difficulty coping with a traditional high school program. The individualized guidance component helps students master the required curriculum. Students are provided with intensive one-to-one counseling, and educational and vocational guidance. Formal group counseling has not yet been implemented for this model.

Return laboratories in the major subject areas are set up for each student. They receive individualized tutoring and spend two to four periods a day working under close supervision. For those students who want to work after graduation, skills development is promoted. The program director also works with community programs that provide instruction in occupational skills development. Most available programs are geared for Spanish-speaking students; none are as yet available for the other two groups.

Model III

This model is designed for those LEP students who are overage for their grade (see Table 3). Students who are over eighteen, and those who dropped out of school and are now returning are included in this model. The objective for these students, who have difficulty

functioning in a traditional sequence, is to help develop the skills and gain the knowledge needed to obtain the General Equivalency Diploma (G.E.D.). These students attend school for a limited time each day depending on their specific deficiencies. The main model goal is to strengthen the reading skills needed for the G.E.D. Students also spend one period a day in the business education department or the industrial arts department. Career and vocational guidance is provided individually; no formal program has been developed.

Table 7 presents the distribution of bilingual program students by instructional component and language group.

TABLE 7

Student Distribution According to Model

Native Language	Grade	Number of Students Model I	Model II	Model III
Arabic	9	12	2	3
	10	3	7	1
	11	4	1	8
	12	3	2	1
Chinese	9	16	1	0
	10	13	2	1
	11	12	2	3
	12	3	0	0
Spanish	9	22	17	0
	10	27	25	5
	11	25	14	8
	12	29	8	8
TOTAL		171	81	38

COURSE OFFERINGS

Tables 8, 9, and 10 present the E.S.L., native language, and content-area courses offered to program students. E.S.L. classes are held for five periods each week and program students attend with other LEP students in the school. Native language studies classes for Spanish- and Chinese-speaking students are also offered five periods per week. Spanish language classes are open to all students interested in language instruction. Content-area courses are exclusively for program students and are offered four hours each week. Paraprofessionals are available for assistance and translation in these classes which are taught 90 percent in the native language.

Table 11 presents three student programs, one from each model.

TABLE 8

Instruction in English as a Second Language and English Reading

Course Title and Level	Number of Classes		Average Class Reg.		Description	Curriculum or Material in Use
	Fall	Spring	Fall	Spring		
SL1	4	1	20	25	Instruction for beginning levels of English proficiency	Lado Series
SL2	3	2	20	16	Instruction for beginning levels of English proficiency	Lado Series
SL3	1	3	27	27	Instruction for advanced English proficiency	Lado Series
SL4	1	3	27	28	Instruction for advanced English proficiency	Lado Series
Oral English	-	2	-	15	Instruction in Speaking	1) Reading for concepts 2) Using good English
Remedial 1	1	-	34	-	Emphasis on reading proficiency	" " "
Remedial 2	1	1	31	30	" " "	" " "
Remedial 3	2	-	28	-	" " "	" " "
Remedial 4	2	2	29	31	" " "	" " "
Remedial 5	4	-	21	-	" " "	" " "
Remedial 6	-	3	-	30	" " "	" " "
Remedial 8	1	3	23	30		

TABLE 9

Instruction in the Native Language(s)

Course Title and Level	Number of Classes Fall	Number of Classes Spring	Average Class Reg. Fall	Average Class Reg. Spring	Description	Curriculum or Material in Use
Chinese for Native Speakers	1	-	30	-	Native Speakers Reading and Writing	Materials Developed
Spanish for Native Speakers	-	2	-	32	Native Speakers Reading and Writing	Corazon de Espana
Spanish 3	10	-	34	-	Beginning Reading and Writing	Espanol al dia
Spanish 4	-	7	-	32	Beginning Reading and Writing	
Spanish 5	6	-	34	-	Intermediate Reading and Writing	1) Cuentos Corrientes 2) Hesse Grammar
Spanish 6	-	6	-	33	Intermediate Reading and Writing	
Spanish 7/9	4	-	32	-	Native Speakers Advancing Reading and Writing	Corazon de Espana
Spanish 8/10	-	3	-	30	Advancing Reading and writing	Corazon de Espana

TABLE 10

Bilingual Instruction in Subject Areas[a]

Fall

Course Title	Number of Classes	Average Register	Language(s) of Instruction
Science I	1	17	Arabic
Social Studies I	1	20	Arabic
Mathematics I	1	10	Arabic
Social Studies I	2	30	Chinese
Computer I	1	21	Spanish
Business I	1	36	Spanish
Social Studies I	2	38	Spanish
	Spring		
Science II	1	26	Arabic
Social Studies II	1	15	Arabic
Mathematics II	1	16	Arabic
Social Studies II	1	20	Chinese
Science I	1	20	Chinese
Computer I[b]	1	21	English
Business II	1	29	Spanish
Social Studies II	2	27	Spanish

[a]All materials used in these classes are appropriate to students' reading level and correspond to mainstream curriculum.

[b]Combined class for Greek, Spanish, Chinese/Vietnamese, and Arabic students.

TABLE 11

Typical Student Programs

Model I	Model II	Model III
12th Grade Arabic Student	11th Grade Hispanic Student	10th Grade Chinese Student
English	E.S.L. 3	E.S.L. 3
French	Spanish 6	World Studies
Bilingual Computer	American Studies II	American Studies
Mathematics (Ninth Grade)	Fundamentals of Math	Mathematics (Ninth Grade)
Accounting	Return LAB	Biology
Hygiene	Music	Guitar
	Physical Education	Physical Education

TRANSITION

The aim of the program is to fully mainstream students after two years. Partial mainstreaming is done before this time -- a decision based on the LAB score (above the twenty-first percentile), teacher recommendations, grades, and interviews conducted by the director. Student and parent preference is also taken into account.

Students enter the mainstream on a three-week trial basis; during this time they are given maximum support and are assisted in making the decision to remain in mainstream classes or return to the

bilingual program. According to staff, some students are eager to enter the mainstream while others prefer the individual attention they receive in the program.

EXIT FROM PROGRAM

During 1982-83, 54 students left the program for different reasons. Table 12 presents the distribution of bilingual students who are no longer in the program.

TABLE 12

Number of Students Leaving the Program by Languge Group and Grade

Language Group	Grade	Status	Number of Students
Arabic	9	No Show	1 (work)
		Discharge	2 (1 out-of-country, 1 mainstream)
	10	No Show	2 (not found)
		Discharge	1 (out-of-state)
	11	No Show	2 (1 work, 1 not found)
		Discharge	1 (out-of-state)
	12	No Show	1 (night school)
		Discharge	1 (graduate)
Chinese	9	Discharge	3 (1 college, 1 mainstream, 1 out-of-state)
	10	none	
	11	Discharge	1 (college)
	12	Discharge	1 (graduate)
Spanish	9	No Show	7 (2 not found, 3 out-of-country, 2 work)
		Discharge	11 (6 Equivalency, 2 out-of-country, 3 not found)
	10	No Show	1 (not found)
		Discharge	11 (6 out-of-country)
	11	No Show	3 (2 out-of-country, 1 not found)
		Discharge	5 (1 army, 2 out-of-country, 2 work)

V. NON-INSTRUCTIONAL COMPONENT

CURRICULUM AND MATERIALS DEVELOPMENT

In addition to providing instructional assistance to program students, resource teachers are responsible for adapting and translating English language curricula into Arabic, Chinese, and Spanish. They spend approximately four hours a day preparing materials. The resource teachers also develop special materials for students in need of supplementary help. One resource teacher suggested that research be done to develop a clearer picture of the range of individual needs that exist, so that appropriate materials can be developed. According to one program student, the translated materials enabled her to understand lesson content, even though she did not speak English. All translated materials, which include vocabulary exercises and exams, are written by hand.

Table 13 lists the materials that have been developed by the program. Instructional materials that have been purchased for use in the classroom, include:

Number of copies	Title
40	The New Earth Science (Combined Edition C77)
40	Computer Book (Using Basic - Second Edition)
30	Practicas De Oficina, Uribe
10	A New English - Chinese Dictionary (Small)
1	A New English - Chinese Dictionary (Large)
1	Ku Man Koon Chee (Vol. 1 & 2)
1	Selected Poems of Tong & Song Dynasties (English Version)
1	Chi-Hai Chung Hua Publica
1	Chi-Yuen
1	Chinese Encyclopedia

TABLE 13

Curriculum and Materials Development and Adaptation

Curriculum or Materials	Status					
	Development (X)	Adaptation (X)	Completed (X)	In Process (X)	Parallel To Mainstream (Y/N)	In Use (Y/N)
Arabic Social Studies	X	X		X	Y	Y
Arabic Science	X	X		X		
Arabic Math	X	X		X		
Chinese Social Studies	X	X		X		
Chinese Language Arts	X			X		
Chinese Science	X	X		X		
Greek Language Arts	X			X		
Greek Science	X	X		X		
Greek Social Studies	X	X		X		
Spanish Social Studies	X	X		X		
Spanish Business	X	X		X		
Spanish Computer	X	X		X		

Since the resource teachers also deal with various personal, domestic, and cultural adjustment problems that program students might encounter, the time they spend with students limits their availability for curriculum development. Furthermore, resource teachers also make themselves available to mainstream teachers, to translate and correct exams of program students.

SUPPORTIVE SERVICES

Personal and vocational guidance is provided by the program director, who is also the coordinator of educational guidance. The program director spends five to six hours a day providing individual guidance to program students. When needed, the resource teachers and paraprofessionals also provide assistance in these areas.

Group counseling has been described as being a major program component; at present, however, this service has yet to be implemented. According to the project director, initial attempts at group counseling turned into "gripe sessions" and were discontinued.

Although the staff is available and responsive to students' problems, no staff member is trained to provide counseling services to students with serious personal problems (e.g., abuse, depression). These students are referred to appropriate community agencies such as Advocates for Children and the Center for Family Life Employment Program. According to the director, existing social service agencies have only English- and Spanish-speaking staff, limiting the services available to the other two groups.

STAFF DEVELOPMENT

Although staff development activities were not a specific program objective this year, three workshops were held for the Title VII program staff on the following topics: improving attendance; classroom management; and improving student attitudes. These workshops were conducted by the program director for all program staff. Similar issues were addressed in monthly staff meetings, which were also attended by the assistant principal for foreign language, art, and music, and those foreign language teachers who have bilingual teaching assignments. During these meetings, school staff members were exposed to the problems of LEP students. The program staff has commented that they have experienced difficulty reaching those staff members not directly involved with LEP students and interpret this difficulty as stemming from lack of knowledge or interest in working with this population. Title VII staff members are available and responsive to those teachers who express interest in learning more about LEP students.

The resource teachers and paraprofessionals are enrolled in part-time degree programs at Teachers College, Columbia University, Brooklyn College, Jersey City College, and Kingsborough Community College. The courses they attend are either directly related to the program, or if not directly related, address curriculum development issues.

PARENTAL AND COMMUNITY INVOLVEMENT

The program's trilingual focus makes it difficult to maintain an active advisory board with parental representation from all language

groups. In addition, the majority of parents have job- or family-related responsibilities that leave little or no time to attend meetings.

Contacts with parents are made mostly through home visits, phone calls, school-wide activities, and field trips for which parents volunteer as chaperones. In addition, Fort Hamilton has a policy stating that all school information and notices be sent to program parents in their native languages.

AFFECTIVE DOMAIN

Student attitudes and achievements are reflected not only in test scores, but in the following areas as well.

Attendance

According to the program director, attendance of program students is higher than that of the school as a whole, despite the fact that these students are a high-risk group. Program students carry an attendance card which is signed by each teacher in each class. The director remains in close contact with both students and parents regarding school attendance.

Extracurricular Activities/Field Trips/Clubs

Program students went on field trips to Radio City Music Hall, the Museum of National History, the New York Planetarium, and the Aquarium. Both the Chinese and Hispanic students have formed cultural clubs and have sponsored a variety of activities such as dances and films. According to the staff, religious and political tensions within the Arabic student group have stood in the way of such social activities.

College Admission

During academic year 1982-83, thirteen program students were attending local colleges (1 Arabic - St. Francis College; 1 Chinese - C.C.N.Y.; 2 Chinese - Borough of Manhattan Community College; 1 Hispanic - Long Island University; 8 Hispanic - Kingsborough Community College). Interviews with students revealed that they held positive attitudes toward the program and its staff. Of the twelfth-grade students who reported post-high school plans, 48 intended to attend college, 6 hoped to find employment or keep a household, 2 had plans to join the armed forces, and 1 student had chosen to enter an alternative high school program.

VI. FINDINGS: STUDENT ACHIEVEMENT AND ATTENDANCE

The following section presents the assessment instruments and procedures, and the results of the testing to evaluate student achievement, as proposed, in 1982-83. (See Appendices for the program's evaluation plan. Note: Objectives 4 and 7 were not analyzed since, according to the program director, they were deleted in the revised scope of work approved.)

ACQUISITION OF ENGLISH SYNTAX

The assessment instrument used for measuring achievement in this area was the Criterion Referenced English Syntax Test (CREST). The CREST was developed by New York City Public Schools to measure mastery of instructional objectives of the E.S.L. curricula at the high school level. There are four items for each objective, and mastery of an objective is achieved when three of the items are answered correctly. The test has three levels: beginning (I), intermediate (II), and advanced (III). The maximum score on Level I and II is 25, while the maximum score on Level III is 15.

Analyses of the first objective was altered slightly from that stated in the program evaluation plan. The data were compared against a criterion of one objective per month mastery, rather than an average of 10 more objectives mastered on the post-test than on the pre-test. Use of the per month calculation will incorporate actual instruction time in the analysis.

Mean differences between pre-test and post-test are calculated to represent the gain scores, and an index which represents the number of objectives mastered per month is computed. However, since the levels are not equated vertically, it is impossible to measure gains for students who change levels. Extensive information on CREST objectives and psychometric properties appears in the Technical Manual New York City English as a Second Language Criterion Referenced English Syntax Test.*

Data were provided for 140 students on whom pre-test (fall semester) and post-test scores (spring semester) were available. Table 14 reveals that approximately 0.76 CREST objectives per month were mastered by students tested on CREST Level I, approximately 0.43 objectives were mastered on CREST Level II, and 0.40 objectives were mastered on CREST Level III. Program students failed to achieve the targeted objective of mastering one CREST objective per month at any of the CREST levels.

Data are also provided (Table 15) for an additional 45 students on whom pre- and post-test scores were available during the spring semester. Inspection of the table reveals that the objective of mastering at least one CREST objective per month was attained at each of the three testing levels.

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*Board of Education of the City of New York, Division of High Schools, 1978.

TABLE 14

Results of the Criterion Referenced English Syntax Test

(Program Students, Pre-Tested in the Fall and Post-Tested in the Spring on Same Test Level)

Test Level	Number of Students	Average Number of Objectives Mastered Pre	Post	Objectives Mastered*	Average Months of Treatment	Objectives Mastered Per Month
I	12	7.67	13.42	5.75	7.57	0.76
II	68	6.81	9.96	3.15	7.39	0.43
III	60	7.73	10.70	2.97	7.30	0.40
TOTAL	140	7.28	10.57	3.29	7.37	0.45

*Post-test minus pre-test.

TABLE 15

Results of the Criterion Referenced English Syntax Test

(Program Students, Pre- and Post-Tested

in the Spring on Same Test Level)

Test Level	Number of Students	Average Number of Objectives Mastered Pre	Post	Objectives Mastered*	Average Months of Treatment	Objectives Mastered Per Month
I	14	7.14	14.93	7.79	3.57	2.04
II	23	6.87	11.22	4.35	3.48	1.27
III	8	4.75	7.38	2.63	3.34	1.06
TOTAL	45	6.58	11.69	5.11	3.48	1.47

*Post-test minus pre-test.

STUDENT ACHIEVEMENT IN MATHEMATICS, SCIENCE, SOCIAL STUDIES AND BUSINESS/VOCATIONAL COURSES

Student performance in content-area courses was analyzed in accordance with objectives 2 and 3. Overall passing rates were calculated and compared against a minimum criterion standard of 70 percent passing. Inspection of Table 16 reveals that the overall student passing rates meet the criterion in mathematics (70 percent passing in both the fall and spring), in science (78.4 percent and 86.9 percent in the fall and spring, respectively), in social studies (80.4 percent and 78.4 percent in the fall and spring, respectively), and in business/vocational courses (85.8 percent and 84.7 percent in the fall and spring, respectively).

Overall passing rates were also computed for each of the targeted language groups in the program. Inspection of Tables 17 and 18 indicate that passing rates were below the criterion (70 percent) for Spanish-speaking students in mathematics courses in both the fall and spring (65.7 percent and 61.3 percent, respectively) and for Arabic-speaking students in mathematics courses in the fall semester (64 percent).

TABLE 16

Number of Program Students Attending Courses and Percent Passing Teacher-Made Examinations in Content-Area Subjects[a]

Content Area	Grade 9 N	Grade 9 % Passing	Grade 10 N	Grade 10 % Passing	Grade 11 N	Grade 11 % Passing	Grade 12 N	Grade 12 % Passing	Total N	Total % Passing
				Fall						
Mathematics	44	65.9	57	77.2	60	58.3	48	81.3	209	70.3
Science	21	66.7	32	75.0	25	84.0	33	84.8	111	78.4
Social Studies	32	65.6	46	80.4	59	79.7	47	91.5	184	80.4
Business/Vocational	63	82.5	63	84.1	53	86.8	46	91.3	225	85.8
				Spring						
Mathematics	51	70.6	38	65.5	53	64.2	45	80.0	207	69.6
Science	33	84.8	39	82.1	35	82.9	30	100	137	86.9
Social Studies	43	76.7	55	67.3	54	83.3	24	95.8	176	78.4
Business/Vocational	61	78.7	55	85.5	56	82.1	57	93.0	229	84.7

[a]Mathematics courses include pre-algebra, algebra, geometry, eleventh- and twelfth-year math, R.C.T. preparation, computer math, programming, English and Spanish High School Equivalency mathematics. Science courses include general science, biology, chemistry, geology/earth science, hygiene/health education, Spanish High School Equivalency science, and "other." Social studies courses include world/global history, American history, economics, civics, and "other." Business/vocational courses include secretarial studies, typing, accounting, keypunching, "other" business electives, wood shop, metal shop, drafting/drawing, art, music, vocational and business experience, and "other."

TABLE 17

Number of Program Students Attending Courses and Percent Passing Teacher-Made Examinations in Content-Area Subjects (Fall)

Content Area	Grade 9 N	Grade 9 % Passing	Grade 10 N	Grade 10 % Passing	Grade 11 N	Grade 11 % Passing	Grade 12 N	Grade 12 % Passing	Total N	Total % Passing
Spanish-Speaking Students										
Mathematics	24	54.2	36	75.0	42	52.4	38	78.9	140	65.7
Science	13	69.2	20	75.0	13	76.9	25	80.0	71	76.1
Social Studies	18	55.6	27	74.1	40	72.5	34	88.2	119	74.8
Business/Vocational	43	83.7	46	80.4	36	91.7	33	90.9	158	86.1
Chinese-Speaking Students										
Mathematics	13	100	16	81.3	10	90.0	4	100	43	90.7
Science	3	66.7	5	80.0	5	100	3	100	16	87.5
Social Studies	8	75.0	12	91.7	12	91.7	5	100	37	89.2
Business/Vocational	10	90.0	12	100	9	100	4	100	35	97.1
Arabic-Speaking Students										
Mathematics	6	33.3	5	80.0	8	62.5	6	83.3	25	64.0
Science	5	60.0	7	71.4	7	85.7	5	100	24	79.2
Social Studies	5	80.0	7	85.7	7	100	8	100	27	92.6
Business/Vocational	10	70.0	5	80.0	7	42.9	9	88.9	31	71.0

TABLE 18

Number of Program Students Attending Courses and Percent Passing Teacher-Made Examinations in Content-Area Subjects (Spring)

Content Area	Grade 9 N	Grade 9 % Passing	Grade 10 N	Grade 10 % Passing	Grade 11 N	Grade 11 % Passing	Grade 12 N	Grade 12 % Passing	Total N	Total % Passing
Spanish-Speaking Students										
Mathematics	23	60.9	34	52.9	32	56.3	35	74.3	124	61.3
Science	11	54.5	18	77.8	18	77.8	25	100	72	81.9
Social Studies	18	66.7	32	56.8	33	78.8	18	94.4	101	72.3
Business/Vocational	35	81.8	29	82.8	32	75.0	43	90.7	137	83.2
Chinese-Speaking Students										
Mathematics	17	82.4	17	82.4	13	92.3	4	100	51	86.3
Science	14	100	13	84.6	11	90.0	2	100	40	92.5
Social Studies	16	81.3	16	81.3	13	92.3	3	100	48	85.4
Business/Vocational	18	83.3	19	89.5	10	100	6	100	53	90.6
Arabic-Speaking Students										
Mathematics	11	72.7	8	87.5	7	42.9	6	100	32	75.0
Science	8	100	8	87.5	5	83.3	3	100	25	92.0
Social Studies	9	88.9	7	85.7	6	83.3	3	100	25	88.0
Business/Vocational	10	60.0	7	85.7	11	81.9	8	100	36	80.6

PERFORMANCE ON G.E.D. EXAMINATION

In accordance with objective 6, data were gathered for all program students taking the High School Equivalency Examination. Of the 12 students on whom data were available, nine (75 percent) passed the examination, surpassing the objective's criterion of a 70 percent passing rate. All students who took the examination were in the Model III program.

ATTENDANCE

In accordance with objective 9, the attendance rate of program students was compared with that of the general school population. The z-test* is used to examine this difference and a resultant z-value sufficiently large to attain statistical difference indicates that the program attendance rate is not based on a representative sample of the school population, that is, the two attendance rates are significantly different. Table 19 provides the data for program student attendance by grade, as well as total attendance results for each language group.

The total program attendance rate (86.5 percent) was found to be significantly greater than the total school attendance rate (76.71 percent, n=2718) at $p<.001$. Additional analysis for each language group revealed significantly higher attendance rates for each program language group (all $p\leq.04$).

(Information pertaining to the school dropout rate was unavailable and therefore this portion of the analysis could not be performed.)

*The z-test formula is:

$$z = \frac{p - P}{\sqrt{\frac{PQ}{n}}}$$

where p=program attendance; P=school attendance rate; Q=(1-P)=the residual of P and n=the number of program students.

TABLE 19

Significance of the Difference Between the Attendance Percentage of Program Students and the Attendance Percentage of the School

Grade	Number of Students	Mean Percentage	Standard Deviation
9	79	84.95	18.57
10	92	83.64	19.50
11	85	87.47	22.75
12	62	91.40	16.58
TOTAL	318	86.50	18.57

Average School-Wide Attendance Percentage: 76.71

Percentage Difference=9.79 $z = 4.13$ $p<.001$

For Each Native Language

Language Group	Number of Students	Mean Percentage	Level of Significance
Spanish	203	84.58	$p = .004$
Arabic	52	83.54	$p = .04$
Chinese	60	95.20	$p = .001$

VII. CONCLUSIONS AND RECOMMENDATIONS

Project SPEED has completed its first year of operation. Its staff is working with enthusiasm and dedication to implement the program and to enable LEP students to graduate and receive a high school diploma. All staff members, with the exception of the Chinese resource teacher and paraprofessional, worked with previously funded Title VII projects (GRASP, ELITES) at Fort Hamilton. Although the objectives of Project SPEED differ from those of its predecessors, all three programs served the needs of bilingual students, specifically those who are newly-arrived. As such, some of the recommendations and observations included in the 1979-80 and 1980-81 evaluations are reiterated in this section.

INSTRUCTIONAL COMPONENT

Project ELITES, the previously funded Title VII program, had a low literacy instructional sequence for those students who lacked basic skills in their native languages. The present project lacks this component. Interviews with staff indicate, however, that many program students fall into this category. It is recommended that a similar instructional sequence be established for those students whose development of English language skills is impeded by literacy problems in the native language. In a related area, one staff member suggested that the program would greatly benefit from researching students' difficulties and specific needs and, based on findings from that research, develop appropriate curricula for use with these students.

A member of the evaluation team visited five classes in session (American government in Arabic/Pullout, American studies in Spanish, bilingual computers, global history, and E.S.L.) and observed that the content-area courses were conducted in the native language, with only new vocabulary presented in English. No clear policy governs language use for instruction in bilingual content areas. The program might consider developing and implementing such a policy. It is also strongly recommended that the program consider implementing formal native language instruction for Arabic and Chinese students, especially for those students with poor reading and writing skills in the native language.

The program's trilingual focus and staff limitations require that students at different levels of ability be placed in the same classes. As one teacher stated, this diversity affects classroom lectures and course requirements; materials must be continually modified according to the levels of students in a particular class. Interviews with several teachers revealed that easier materials are often used for LEP students; for example, using a filmstrip instead of a lecture to help these students understand the lesson more easily. Requirements are often changed and modified to enable bilingual students to complete assignments; for example, one teacher requested a map of the students' native country instead of a paper. Providing instruction appropriate for diverse groups of students is an area requiring additional consideration.

Although the three instructional models are presented as distinct entities both in the program proposal and by the director, they were not easily distinguished after examining program materials and

student programs or by interviewing students. The counseling, educational, and vocational guidance components that were to differentiate the models have not been formally implemented.

SUPPORTIVE SERVICES

Although the program proposal emphasized the importance of guidance services based on the specific objectives of the three models, this component has not yet been fully implemented. The coordinator provides both individual and group counseling; at present, services are provided on an "as needed" basis. Group counseling has not been added to the guidance component due to lack of student motivation and limited time available to the coordinator for counseling. Individual and group counseling on a more formal and consistent basis is recommended. The program might coordinate a series of presentations for students by bilingual professionals from a variety of occupations. In addition, experts could be brought in to conduct career awareness/orientation and vocational workshops for students. Through these activities, students would be exposed to positive role models and could utilize program services more effectively to serve their specific needs.

The program director is also encouraged to explore and utilize outside services to supplement the guidance component. Such sources might include local counseling and psychology departments which emphasize ethnic counseling. Experts in the field can be invited to conduct workshops and staff training sessions at Fort Hamilton. In addition, an internship program could be developed in which graduate students can provide tutoring, teaching, as well as individual and group counseling

to program students.

Finally, due to budget cuts and the resulting inability to hire a bilingual counselor, the project might consider bringing in experts in this area to conduct staff workshops and on-site supervision. The program has mainly focused on drop-out prevention and remediation; many of the psychological factors contributing to student adjustment problems have been overlooked.

STAFF DEVELOPMENT

The program sponsored four workshops and held monthly meetings which focused on staff development. In addition to current activities, the program might consider asking staff members to attend conferences on bilingual education and inviting experts to present seminars or workshops on staff training.

It is further recommended that the program develop an outreach program geared toward educating and informing non-program staff at Fort Hamilton with regard to the difficulties faced by bilingual students in adjusting to and coping with a traditional high school setting.

PARENT INVOLVEMENT

Parents of participating students are, at present, only marginally involved in program activities. The program should consider holding informal workshops for parents at which bilingual staff members might provide an overview of the American educational system and present issues of concern to bilingual students and their families. In addition, through such workshops, parents would be exposed to members of other language

groups. This kinds of introduction might encourage parents to participate more actively in program activities.

CURRICULUM DEVELOPMENT

Presently, materials translated into the three native languages are mimeographed and distributed to students. It is suggested that these materials be professionally duplicated and bound. Mimeographed materials that are stapled and lack covers may be judged by students and their parents as inferior to the commercial textbooks available to mainstream students.

DOCUMENTATION OF PROGRAM ACTIVITIES AND STUDENT ACHIEVEMENT

As has been suggested for previous projects, it is recommended that information on program activities such as field trips, agendas for in-service workshops, college applications processed, colleges attended by graduates of the program, and other related areas be maintained so that they can be easily retrieved for documentation purposes.

A well structured and thorough system to document program activities is particularly crucial for a program that is as complex in instructional organization and diversity of language groups served as Project SPEED.

VIII. APPENDICES

(e) Evaluation Plan

(1) (2) The evaluation design will extend to all the components of the program.

A. Instructional Objectives

1. 75% of the students enrolled in ESL classes will master ten more objectives on the post-test than on the pre-test.

i. Instrument:

Criterion Referenced English Syntax Test (CREST)

ii. Data Analysis Procedure

Calculate the mean number of objectives mastered on a monthly basis

iii. Time Line:

Pre-testing - October 1982

Post-testing - May 1983

Data collection - June 1983

iv. Staff Responsibilities

Administration of tests

Grading of tests

Data collection

2. 70% of the students enrolled in the content area will pass the subjects (mathematics, science, social studies and various electives).

i. Instrument:

Teacher developed tests

ii. Data Analysis Procedure

Calculate the percentage of students passing examinations

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iii. Time Line:

Ongoing testing

Data collection - May-June 1983

iv. Staff Responsibilities

Development of evaluation instrument

Administration of tests

Grading of tests

Data collection

3. 80% of the students attending special interest classes will pass the subjects thus accumulating credits towards graduation.

i. Instrument:

Teacher developed tests

Student projects

ii. Data Analysis Procedure

Calculate the percentage of students passing examinations

iii. Time Line:

Ongoing testing

Data collection - May-June 1983

iv. Staff Responsibilities

Development of evaluation instruments

Administration of tests

Grading of tests

Data collection

Evaluation of student projects

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4. 70% of the students enrolled in the Native Language and 65% of the students enrolled in Native Language Arts will increase their performance on the appropriate level of the Prueba de Lectura at the .05 level of significance.

i. Instrument:

Prueba de Lectura

ii. Data Analysis Procedure

A correlated t-test will be performed for each group

iii. Time Line:

Pre-testing October 1982

Post-testing May 1983

Data collection - June 1983

iv. Staff Responsibilities

Administration of tests

Grading of tests

Data collection

5. 50% of the students attending the Return Laboratory will be successfully mainstreamed within one term.

i. Instrument:

School records

ii. Data Analysis Procedure

Compute the number of students mainstreamed as a percentage of the total number enrolled in the laboratory and compare their achievemen

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iii. Time Line:

Mainstreaming - end of term - January 1983, June 1983

iv. Staff Responsibilities

Ongoing assessment of individual students' work.

Administration and evaluation of tests comparable to those administered in mainstream

Arrange data need for transfer to mainstream

6. 70% of all students enrolled in the high school equivalency preparation program will pass the High School Equivalency Examination and will receive a diplom

i. Instrument:

High School Equivalency Examination

ii. Data Analysis Procedure

Tabulation of test results, computation of percentage of students' passing

iii. Time Line:

Ongoing practice testing

Official GED given bimonthly

iv. Staff Responsibilities

Assessment of student readiness to take GED exam

Data Collection

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7. Students who remain in the high school equivalency preparation program for one year will increase their level of English reading ability at the .05 level of statistical significance.

i. Instrument:

New York City Reading Test (PSEN)

i. Data Analysis Procedure:

Correlated t - test will be performed for each grade/test level

iii. Time Line:

Pre-testing - October 1982

Post-testing - May 1983

iv. Staff REsponsibilities

Administration of tests

Data collection

8. The percentage of students placed in college or vocational training institutions will be equal or greater than that of mainstream candidates.

i. Instrument:

School records, interviews, applications

ii. Data Analysis Procedure

Computation of percentage of students placed in above named institutions and comparison to mainstream data

iii. Time Line:

End of semesters, January 1983, June 1983

iv. Staff REsponsibilities

Maintenance of pertinent records

Data collection

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9. The program students will have a higher rate of attendance and a significantly lower dropout rate than similar mainstream students. The level of significance will be at .05.

i. Instrument:

School records (permanent record cards, attendance records, student profiles)

ii. Data Analysis Procedure

Test for the difference between independent proportions

iii. Time Line:

September 1982, January 1983, May 1983

iv. Staff Responsibilities

Maintenance of records

Data collection

10. 100% of the students in the program will attend three or more group and individual guidance sessions

i. Instrument:

Program records, student profiles

ii. Data Analysis Procedure

Assessment of student-counselor planned educational and vocational aspirations

iii. Time Line:

Ongoing process

iv. Staff Responsibilities

Maintenance of records

Data collection

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B. Staff Development

1. 100% of the program staff will receive in-service training.

i. Instrument:

Workshop attendance records, workshop minutes

ii. Data Analysis Procedure

Tabulation of attendance compared to criterion level

iii. Time Line:

One workshop per month between October 1982 and May 1983

iv. Staff Responsibilities

Maintenance of records

Data collection

2. 50% of program staff members will receive formal training.

i. Instrument:

College transcripts

ii. Data Analysis Procedure

Tabulation of number of credits earned compared to criterion level

iii. Time Line:

September 1982 to June 1983 (same in subsequent years of funding)

iv. Staff Responsibilities

Submission of records

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C. Parent Involvement

1. 50% of the parents will confer with program personnel at least once a semester.

i. Instrument:

Records of conferences

ii. Data Analysis Procedure

Tabulation of attendance compared to criterion level

iii. Time Line:

Ongoing from September 1982 to termination of project

iv. Staff Responsibilities

Maintenance of records

Data collection

2. 30% of the parents will attend two to four parent workshops.

i. Instrument:

Agendas, attendance records, minutes

ii. Data Analysis Procedure

Tabulation of attendance compared to criterion level

iii. Time Line:

Ongoing from September 1982 to termination of project

iv. Staff Responsibilities

Maintenance of records

Data collection

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The evaluation of the project will be conducted by the New York City Board of Education's Office of Educational Evaluation. All pertinent data will be submitted to that office at the end of each school year and will be analyzed in terms of the program's objectives. The final evaluation will contain results of this analysis as well as an assessment made by evaluators during several site visits. The evaluation report will be submitted directly to the funding source by the Office of Educational Evaluation.

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APPENDIX B

Staff Characteristics: Professional and Paraprofessional Staff

Function(s)	% Time for Each Function	Date Appt. to Each Function	Education (degrees)	Certification	License(s)	Yrs. in Education	Yrs. Exp. Bilingual	Yrs. Exp. E.S.L.	Years Other Relevant Experience
Project Director	100	2/82	B.A. Spanish M.A. Ed. Admin.	NYC NYC	Spanish D.H.S.	15 - HS Sp.	8	None	
Resource Specialist Arabic	100	9/81	Chemistry	NYC	Chem/Gen.Sci. DHS	27 - HS Sci.	2	None	
Paraprofessional Arabic	100	4/16/81	B.A. Science (Major Math)	NYS	None	7 - HS Math.	2	None	
Resource Specialist Chinese	100	10/79	B.A. Religious Ed. M.A. Secondary Ed.	NYC	Chinese DHS	4 - HS Chinese	0	2	
Paraprofessional Chinese	100	10/29/82	B.A. Geology M.A. Teaching	NO	None	6 mos.	6 mos.		None
Bilingual Att. Coordinator - Bil. Social Studies	60 40	9/81 2/76	B.A. Spanish M.A. Span/Ed. 30 + Guidance	NYC	Span. DHS Sp. Bil. Anc. Soc. Stud.	13 - HS Span.	13	7	

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APPENDIX B (con't)

Staff Characteristics: Professional and Paraprofessional Staff

Function(s)	% Time for Each Function	Date appt. to Each Function	Education (degrees)	Certification	License(s)	Yrs. in Education	Yrs. Exp. Bilingual	Yrs. Exp. E.S.L.	Years Other Relevant Experience
Sp. Lang. Arts Bil. Dean Bil. Computer	60 40 20	9/63 9/78 9/81	M.A. Spanish 6 yrs. cert. Spanish B.A. Spanish	NYC NYC NYC	Span. DHS	20 - HS Span.	4	None	
Sp. Lang. Arts Sp. Bil. Lang. Arts	60 40	2/62	M.A. Ed. Admin. M.A. Spanish	NYC NYC	Span. DHS	24 - HS Span.	6	–	
E.S.L.	100	9/4/70	B.A. + 60 credits grad - Fr. (Romance language)	NYC	Common Branches Common Branches HS - Fr./E.S.L.	26 - E.S.L.	None		Fulbright Teacher of English Finland 1956-1967
E.S.L.	100	2/74	B.A. - French M.A. - Fr. Ed.	NYC NYS	E.S.L. - Day HS Fr. - Day HS	14 1/2 - HS/Lang.	None	9 1/2	None
Math E.S.L.	60 40	9/69 9/69	B.S. Math MSE - Education	NYC NYS		15 - all subj.	None	None	Business experience training personnel over 25 years

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APPENDIX B (con't)

Staff Ch racteristics: Professional and Paraprofessional Staff

Function(s)	% Time for Each Function	Date appt. to Each Function	Education (degrees)	Certifi-cation	License(s)	Yrs. in Education	Yrs. Exp. Bilingual	Yrs. Exp. E.S.L.	Years Other Relevant Experience
English E.S.L.	60 40	9/54	B.A. Eng. + 30 credits in other areas 30 credits English	NYC	Teacher of English	27 - HS Eng.	0	3 mos.	
English E.S.L.	60 40	9/71	B.A. English M.A.	NYC	English HS (Day)	18	None	None	
French Lang. Arts Greek Bil. Lang. Arts	40 60	9/80 9/73	M.A. Pol. Science	NYS	Md. Greek Day HS		9	2	
Paraprofessional	100	5/78 1/79					5	1 1/2	

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